

9. Road Maintenance and Abandonment Planning for Large Forest Landowners

9.1 Introduction

Forest practices rules include a road maintenance and abandonment program to prevent sediment and hydrology-related impacts to public resources such as fish and water quality. The rules require large forest landowners (as defined in WAC 222-16-010 under “Forest Landowner” and in Section 3 of the Board Manual) to develop and implement a Road Maintenance and Abandonment Plan (RMAP) for roads within their ownership. In an effort to minimize the economic hardship on small forest landowners, the 2003 Washington Legislature passed a RMAP bill (HB1095) that modified the definition of “small forest landowner” and clarified how the RMAP requirements applied to small forest landowners. Small forest landowners have the option to submit a “checklist” RMAP with each forest practices application or notification, rather than to provide a plan for their entire ownership. DNR, in consultation with Washington Department of Fish and Wildlife and Department of Ecology submitted [A Report to the Legislature: Road Maintenance and Abandonment Plan Checklist Report](#) (DNR 2008) to the Legislature and the Forest Practices Board in December 2008 on the effectiveness of the checklist RMAP.

Large forest landowners were required by July 1, 2006, to have all roads within their ownership covered under a DNR-approved Road Maintenance and Abandonment Plan (WAC 222-24-051) and to bring all roads into compliance with forest practices standards by July 1, 2016. This includes all roads that were constructed or used for forest practices after 1974. An inventory and assessment of orphaned roads (i.e., forest roads and railroad grades not used for forest practices since 1974) must also be included in the plan. In areas where watershed analysis has been conducted and approved, large forest landowners may elect to follow the watershed administrative unit-road maintenance plan rather than developing a Road Maintenance and Abandonment Plan under WAC 222-24-051, provided all roads in the planning area are in compliance with the current rules by July 1, 2016.

9.2 Road Maintenance and Abandonment Plan Implementation

The RMAP process is intended to bring all roads owned by large forest landowners into compliance with forest practices standards by July 1, 2016. The following tables, “RMAP Accomplishment Report From 2001-2009”, and “Yearly Cumulative Reports” details the progress that’s been made by both large and small landowners from July 2001 until December 2009.

RMAP ACCOMPLISHMENT REPORT FROM 2001-2009 - Information as of 12/31/2009

DNR Region	Number of approved RMAPs ¹	Number of Miles of Forest Roads Assessed	Number of Miles of Road that have been Improved to Rule Standards	Miles of DNR Approved Road Abandonment Completed	Miles of Orphaned Roads Identified	Number of Fish Passage Barriers Removed	Miles of fish Passage Opened	Number of Checklist RMAPS Submitted by Small Forest Landowner ²
Northeast	8	7,625	4,599	299	96	579	289	2,407
Northwest	29	5,841	1,955	908	650	209	69	1,499
Olympic	22	7,648	1,092	109	353	429	246	719
Pacific Cascade	34	21,942	6,528	544	715	1,324	645	3,028
South Puget Sound	15	7,886	763	268	220	265	143	694
Southeast	18	6,500	1,258	493	271	335	177	457
Statewide Totals	126	57,442	16,195	2,621	2,305	3,141	1,569	8,804

¹ Large landowners may have more than 1 RMAP; this number may include small landowners who have chosen to submit a full RMAP

² Small forest landowners may submit more than 1 checklist

State Wide Yearly Cumulative Reports

Year	Total # of Approved RMAP's & Submitted Checklists	***Total # of Submitted Checklist RMAPs by Small Landowners	Total Miles of Forest Roads Assessed in RMAPs	Miles of Road Improved to Rule Standards	Miles of DNR Approved Road Abandonment Completed	Miles of Orphaned Roads	Miles of Fish Passage Opened	# of Structures on Fish Streams Removed or Replaced
2001-2002	4,066	---	15,484		645	502	52	46
2001-2003	5,530	---	27,072		1,007 / *362	1,246	175 / *123	355 / *309
2001-2004	7,401	---	48,051		1,587 / *580	1,944	647 / *472	1,217 / *908
2001-2005	8,419	---	58,843		1,856 / *269	2,107	775 / *128	1,363 / *146
2001-2006	9,950	---	59,220		2,068 / *212	2,313	982 / *207	1,819 / *456
**2001-2007	107	8,121	56,936	13,140	2,153 / *85	2,293	1,221 / *239	2,248 / *429
2001- 2008	130	8,628 / *506	57,442	15,019 / *1,879	2,431 / *278	2,305	1,448 / *227	2,871 / *623
2001-2009	126	8,804 / *176	57,442	16,195 / *1,176	2,621 / *190	2,305	1,569 / *121	3,141 / *270

* Number represents the increase from the previous year's report.

**2007 is the first year the number of submitted large landowner RMAPs and submitted small landowner RMAP Checklists is separated.

Commitments were made in the 2006-2007 annual report to provide additional information in subsequent reports relating to the numbers of fish passage barriers for large forest landowners

and a summary of those repaired or replaced; miles of forest road improved as a result of industrial RMAPs; and an update on the achievability of the scheduled RMAPs work by 2016.

Fish Passage Barriers

The following table, “Fish Passage Barrier Information for Large Landowners” displays the total number of presumed fish passage barriers identified in RMAPs by DNR region. It also shows how many have been repaired cumulatively since 2001; the total repaired in calendar year 2009, and the percent of total repaired as of December 31, 2009.

Fish Passage Barrier Information for Large Landowners

DNR Region	Total # of fish passage barriers in RMAPs*	Cumulative repairs from 2001-2009	Total repaired or replaced in calendar year 2009	% of total repaired or replaced as of 12/31/2009
Northeast	861	579	64	67%
Northwest	610	209	15	34%
Olympic	1,194	429	75	36%
Pacific Cascade	1,666**	1,324	69	79%
South Puget Sound	676	265	24	39%
Southeast	573	335	21	58%
Totals	5,580	3,141	268	56%

*This number may fluctuate as water types are confirmed and/or modified.

** This number changed significantly from last year’s report due to an initial reporting error.

Road Improvements

In an effort to compile the number of forest road miles improved since the Road Maintenance and Abandonment Plan forest practices rule was effective, DNR sent a letter in March 2008 to all industrial forest landowners with Road Maintenance and Abandonment Plans, asking for the following information:

1. How many miles of forest road were originally identified for improvement to meet the requirements of Chapter 222-24 WAC, *Road Construction and Maintenance*?
2. Approximately how many of those forest road miles identified in question #1 have been improved to meet the requirement of Chapter 222-24 WAC, *Road Construction and Maintenance* as of December 31, 2007?

The letter also explained that beginning with the 2008 RMAP annual reporting cycle, industrial landowners will be asked to include the total number of miles of forest roads improved during the past calendar year (See “RMAP Accomplishment Report From 2001-2009” above). This is an addition to the usual annual RMAP reporting requirements.

Ninety-nine letters were sent and 77 responses were received; a 77 percent response rate. The responses represented 219 individual Road Maintenance and Abandonment Plans. The majority of the 22 landowners who did not respond are mid-sized forest landowners with fewer miles of forest road overall on the landscape. Statewide, landowners responding reported approximately 22,900 miles of forest road identified as needing improvement—out of 57,442 total miles of

forest road. As of December 2009, approximately 16,195 miles have been improved—a 71 percent accomplishment rate.

There was some initial confusion about what constituted road improvement as landowners responded to the March 2008 letter. As a result, DNR established a consistent working definition for road improvement in October 2008 and provided a guidance document to forest practices staff. Improvements are defined as “only those road related improvement structures which require fixes to bring the existing road built prior to 2000 up to the current (2001) forest practices rule standards.” (Guidance from Gary Graves, Assistant Division Manager, Forest Practices Division – October 13, 2008). As per the guidance, examples of road improvements include removing fish passage barriers, pulling back sidecast, adding cross drains, abandoning forest roads, etc. Improvements do not include normal maintenance activities such as routine road grading, adding surfacing, pulling ditches, etc.

Achievability by 2016

The following tools are used to ensure that landowners meet the obligations of their approved Road Maintenance and Abandonment Plans in an even-flow manner by July 1, 2016:

- **Annual Report**
Landowners are required (WAC 222-24-051 (8)) to annually report on work accomplished for the previous year and to submit a detailed description of the upcoming year’s work. Any modifications to the upcoming work schedule are included in the landowner’s annual report and reviewed in consultation with Department of Ecology, Washington Department of Fish and Wildlife, affected tribes and other interested parties.
- **Annual meetings**
Annual meetings are held between DNR RMAPs staff, industrial forest landowners, and others to discuss accomplishments, upcoming plans, project priorities, and landowner’s ability to meet the scheduled work required by 2016. Further meetings may be necessary to refine the current work schedule or to request a new work schedule for evaluation and acceptance by DNR in order to meet the target deadline.

The same October 13, 2008 guidance referred to above outlined the forest practices program’s expectations regarding the term “even-flow” when evaluating Road Maintenance and Abandonment Plans. The guidance states the following:

Even flow: First, review the list of identified work that each landowner submitted during the planning phase including stream crossing cmp removal, stream crossing culvert replacement, ditching, grading, side cast pullback, adding cross drain cmps and road abandonment. Next, compare the original list of work to the list of accomplishments submitted with the annual reports. Evaluate the progress that has been made against what originally needed to be done and determine – based on your best professional judgment and knowledge of the situation - whether or not it is likely the remaining work can be completed in the next 7 or 8 operating seasons. If the RMAP Specialist in consultation with the FP District Manager and RP&S Assistant

concludes that the individual landowner is making sufficient annual progress that it is likely all the necessary work will be finished by July 1, 2016 then the landowner is achieving even flow. However, if you conclude that the landowner is only doing the minimal work necessary and will not likely accomplish all of the identified and necessary work by July 1, 2016 then they are not meeting the even flow concept. Should you determine that a landowner is not meeting the even flow concept then you need to meet with the landowner and discuss your concerns and expectations for future accomplishments. One of the enforcement documents would be used to set dates for future checks. At the end of the meeting the landowner needs to know what action(s) DNR will take if they do not comply. Documentation of the discussion is recommended either by letter or ICN.

(Guidance from Gary Graves, Assistant Division Manager, Forest Practices Division – October 13, 2008).

9.3 Forests and Fish Policy Committee – Road Policy Work Group

Road improvement and fish passage barrier work outlined in forest landowner's RMAPs is critical to achieving the goals outlined in the Forests and Fish Report. This work requires significant financial outlay each year, primarily financed by timber revenues on private forest lands. While landowners have made substantial progress in meeting their Road Maintenance and Abandonment Plan commitments, the recent economic downturn has had a significant impact on the resources available to accomplish the work by July 2016. As a result, state and landowner interests have asked the Forests and Fish Policy Committee to make a recommendation to the Forest Practices Board seeking an adjustment to the current RMAP implementation deadline. In response, Forests and Fish Policy Committee appointed a sub-policy group, *the Road Policy Work Group*, to address the issue. The Road Policy Work Group and the staff group appointed to provide support to the sub-group include state, federal, tribal, conservation, and landowner interests.

During the Road Policy Work Group's discussion, these common principles emerged and helped to inform the recommendation from the sub-group to the Forests and Fish Policy Committee (Proposed RMAP Extension Recommendations, July 1, 2010):

- An RMAP extension must provide assurances that public resources will be protected during the extension period, while providing near-term financial relief for the timber industry;
- An RMAP extension should be efficiently administered, given staffing and financial constraints for state agencies, tribes, and landowners;
- New and amended RMAPs need to be reported in a manner that allows information to be rolled up to the state level to enhance understanding of whether progress is adequate at landowner, region, and state levels;
- An expanded, consistent and transparent system using compatible data collection methods and procedures will enable agencies, tribes and landowners to more effectively track progress and compliance;

- Funding is needed to determine the scope of forest road maintenance and fish passage barrier needs in timber counties and on small forest ownerships;
- Reinvigorating the collaborative Timber/Fish/Wildlife approach will optimize progress toward achieving RMAP objectives as well as overall Forests and Fish goals.

The recommendation from the Forests and Fish Policy Committee includes the following three components:

1. Change to the Forest Practices Rules –
The recommended rule change would allow landowners to apply for an extension of the RMAP deadline for up to five years (to July 2021). The rule change would amend the completion dates in WAC 222-24-050 and 051 for RMAPs from July 1, 2016 to July 1, 2021.
2. Update to the Forest Practices Board Manual –
Forest Practices Board Manual Section 3 (Guidelines for Forest Roads) may also be revised to update RMAP reporting standards and procedures.
3. Development of an operational plan –
Elements of the operational plan include development of new RMAP reporting forms and procedures and landowners submitting a revised RMAP showing an adjusted even-flow schedule over the extension period. This will allow improved tracking and reporting with consistent data standards across all DNR regions. The plan would also include a commitment to enhance communication and coordination by holding an annual RMAP status meeting at the Policy level, and by re-energizing regional meetings among DNR RMAP Specialists, Department of Ecology, Washington Department of Fish and Wildlife, tribal staff and landowners.

The plan would also include an agreement by all caucuses to collaboratively pursue federal funding to accelerate fish passage barrier repairs through the Family Forest Fish Passage Program and for county access roads. The caucuses also agreed to collaboratively pursue funding to assess the condition of forest roads on small landowner properties, for adaptive management, and to complete current work on watershed analysis.

The Proposed RMAP Extension Recommendations and associated materials can be found at http://dnr.wa.gov/Publications/bc_fp_materials_20100810.pdf under the Forests and Fish Policy's RMAPS Proposal tab.

The recommendations will be presented to the Forest Practices Board at their August 10, 2010 meeting. The outcome of the meeting will be included in the 2010-2011 Forest Practices HCP annual report.

9.4 Washington Department of Fish and Wildlife Efforts

Road Maintenance and Abandonment Plans are one of the major activities for Washington Department of Fish and Wildlife's (WDFW) Forests and Fish biologists who provide an essential role in the review and implementation of RMAPs. The following is a description summary of the RMAPs duties performed by the Washington Department of Fish and Wildlife staff.

- Review of new and ongoing RMAP proposals.
- Issue Hydraulic Project Approvals for RMAP work. Approximately 907 RMAP related Hydraulic Project Approvals were reviewed in Fiscal Year 2010.

The 2016 deadline for completing RMAP work will continue to create a large demand for Hydraulic Project Approvals. The number of applications associated with large landowner RMAPs has grown significantly over the past few years, from 230 in 2002, to 2963 in 2006. In FY 2010 2,033 forest practice applications were reviewed for Hydraulic Project Approval requirements. The complexity of technical assistance and Hydraulic Project Approvals needed from WDFW biologists has increased as work is shifting from the easier fixes to the more challenging crossing structures as well as structures located higher in the watershed.

- Review forest practices applications for Hydraulic Project Approval requirements, provide site reviews, issue Hydraulic Project Approval permits, and provide other technical assistance as needed.
- Develop, review, and consult with small forest landowners addressing stream typing, aquatic resource protection and road issues. Provide technical assistance, pre-site reviews, review of completed long-term plans, and issue Hydraulic Project Approvals for small forested landowners.
- Review revised RMAPs as landowners make annual changes pertaining to fish passage structures, fish habitat, stream typing, and sediment delivery.
- Review revised RMAPs as land ownership changes. Ownership changes have been occurring at a relatively high rate.
- Provide technical assistance and review for Alternate Plans for both small and large industrial landowners.
- Validate stream typing, including identifying the breaks between fish and non-fish streams, as part of the RMAPs process, as well as implementation of the forest practices rules for riparian zones.

With the development of the DNR hydro-layer, state and private landowners have increased their efforts in identifying breaks between fish and non-fish streams. Additionally, as a result of the stream type surveys, landowners are submitting hundreds of water type change forms to DNR requesting changes to water type maps. Many of

these water type modifications require more than one site review and have substantially increased Forests and Fish biologist's workload.

- Participate in the review and development of Forests and Fish Report-related research through Cooperative Monitoring, Evaluation and Research Committee participation.
- Provide technical assistance as needed to forest landowners for aquatic related mitigation and restoration and to identify specific habitat needs for species of concern.